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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------|------------------|
| 10/766,727 | 01/27/2004 | Roland Gallay | M101US | 3438 |
| 24272 | 7590 | 06/15/2005 | | EXAMINER |
| Gregory J. Koerner Redwood Patent Law 1291 East Hillsdale Boulevard Suite 205 Foster City, CA 94404 | | | | HA, NGUYEN T |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2831 | |
| | | | DATE MAILED: 06/15/2005 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/766,727 | GALLAY ET AL. | |
| | Examiner | Art Unit | |
| | Nguyen T Ha | 2831 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03/21/2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-25 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 19 is rejected under 35 U.S.C. 102(e) as being anticipated by Sakata et al. (US 6,870,725).

Regarding claim 19, Sakata et al. disclose a capacitor comprising a double layer capacitor (20) and housing means (22) for housing the double layer capacitor (figure 5).

4. Claims 18 and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Noguchi et al. (US 6,433,997).

Regarding claim 18, the method steps of making a battery-sized capacitor are inherent in the structure device as disclosed by Noguchi et al. Noguchi et al. disclose:

- providing a double layer capacitor (1);
- providing a battery sized housing/vessel (2), the housing including an open end (column 2, lines 41-42);
- inserting the double layer capacitor into the open end of the housing (figure 1); and
- sealing the open end of the housing (column 2, lines 41-42).

Regarding claims 21 & 23, Noguchi et al. disclose a battery sized energy storage device/double-layer capacitor (figure 1) comprising:

- a housing (2, column 2, line 39); and
- a rolled electrode (3, column 2, line 39), the rolled electrode including two collectors (11 & 14, column 5, lines 18-19), wherein the two collectors and the housing comprise substantially the same metal (column 2, line 50 and 59-60 and column 3, lines 24-25), wherein the collectors (11 & 14) are coupled to the housing to form an electrical connection (figure 1).

Regarding claim 22, Noguchi et al. disclose the electrical connection providing a polarity independent path for application of energy to the energy storage device (figure 2).

Regarding claim 24, Noguchi et al. disclose the electrical connection being able to receive energy with positive or negative polarity (6 or 7, figure 1).

Art Unit: 2831

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakata et al. (US 6,870,725) in view of Harats et al. (US 5,554,918).

Regarding claim 1, Sakata et al. disclose a capacitor/battery comprising:

- a housing (22);
- a capacitor cell (20), the cell disposed in the housing and electrically coupled to the housing (figure 5).

Sakata et al. fail to teach the housing having dimensions that conform to standardized battery dimensions.

Harats et al. teach a battery having a housing with a size corresponding to a standard cell size (column 4, lines 27-28).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the battery housing of Harats et al. in Sakata et al. in order to enable the battery to be used in a device accepting standardized battery configurations and reduce the cost for the manufacture.

Regarding claims 2-5, **Harats et al. further teach** the housing comprises a standard D-cell sized battery (claim 2), C-cell sized battery (claim 3), AA-cell sized battery (claim 4) and an AAA-cell sized battery (claim 5) form factor (column 4, lines 27-30).

Regarding claim 6, Sakata et al. further disclose the housing comprises one or more connectors/terminals (32), wherein the connectors adapted for connection with an electrical circuit

Regarding claim 7, Sakata et al. discloses the capacitor cell comprises a double-layer capacitor (figure 1).

Regarding claim 8, Sakata et al. disclose the double-layer capacitor comprising a dry particle based electrode/carbon electrode (column 6, lines 27-28).

Regarding claim 9, the teaching of Harats et al. includes the double-layer capacitor comprises a dry particle based rolled electrode (figure 1).

Regarding claim 10, Sakata et al. disclose the double layer capacitor includes two collectors (13), wherein the collectors are electrically coupled to the housing wherein the two collectors and the housing comprise substantially the same metal.

Regarding claim 11, the teaching of Harats et al. includes the capacitor comprising a nominal maximum operating voltage of about 4.5V (column 5, lines 11-14, which is within the claimed range).

Regarding claim 12, Sakata et al. disclose the capacitor comprises a capacitance of about 0.1 Farad or above (column 14, lines 36-38).

Regarding claims 13-14, the teaching of Harats et al. includes the capacitor comprises a specific energy density at about 2.5 volts (column 3, lines 59-61, which is within the claimed range).

Regarding claim 15, the teaching of Sakata et al. in view of Harats including all the claimed limitations discussed above with respect to claim 2 above, except for the housing comprising an outer diameter of 33 +0/-1 mm and a height of 61.5=0/-2 mm. It would have been an obvious matter of design choice to have the housing comprise an outer diameter of 33 +0/-1 mm and a height of 61.5=0/-2 mm, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose, 105 USPQ 237 (CCPA 1955)*.

Regarding claim 16, Sakata et al., as modified, show all the claimed limitations with respect to claim 1 above. Harats et al. further teach the housing comprises a standardized power tool battery sized form factor (column 4, lines 27-28).

Regarding claim 17, Sakata et al. disclose a double layer capacitor (figure 1) comprising:

- a housing (22);

- a double layer capacitor (20) electrically coupled to the housing within the housing (figure 5).

Sakata et al. fail to teach the housing comprising dimensions that conform to standardized battery dimensions.

Harats et al. teach a battery having a housing of a size corresponding to a standard cell size (column 4, lines 27-35).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the battery housing of Harats with Sakata et al. capacitor cell in order to enable the battery to be used in a device accepting standardized battery configurations and reduce the cost for the manufacture.

Regarding claim 20, Sakata et al. discloses all the claimed limitations discussed above with respect to claim 19, except for the housing means comprises a battery form factor sized housing.

Harats et al. teach a housing means comprising a battery form factor sized housing (column 4, lines 27-28).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the battery housing of Harats with Sakata et al. capacitor cell in order to enable the battery to be used in a device accepting standardized battery configurations and reduce the cost for the manufacture.

7. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi et al. (US 6,433,997) in view of O'phelan et al. (US 6,509,588).

Regarding claim 25, Noguchi et al. disclose all the claimed limitations discussed above with respect to claim 21, except for the electrical connection comprising a laser weld.

O'phelan et al. teach a capacitor having connection members 206 and 306 being laser edge-welded (column 7, lines 36-37).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the laser weld of O'phelan with Noguchi for welding the connection in order to prevent damage to the connection.

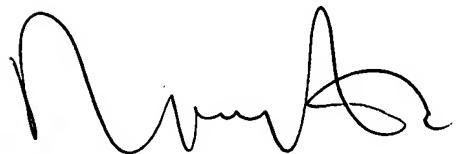
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T Ha whose telephone number is 571-272-1974. The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Nguyen T. Ha".

Nguyen T. Ha
June 13, 2005